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A rejoinder to Douglas Skinner's 'Accounting for intangibles – a critical review of policy recommendations'

Baruch Lev*

1. Introduction

In a thoughtful critique of various proposals to change the current financial reporting of intangibles and their consequences, Douglas Skinner concludes '... the case for reform is surprisingly weak, ... capital markets actually function rather well, ... an approach to intangibles that involves mandating more extensive disclosure in this area is likely to be unsuccessful, ... there are market-based incentives for companies to voluntarily provide this disclosure, ... proposals to modify the current accounting model ... are flawed ...'. The following brief comments make it clear why I take exception to these conclusions, and yet I commend Skinner for urging researchers and policymakers to base their recommendations on solid research.

2. Market incentives: déjà vu all over again

A major theme of Skinner's rejection of the various proposals for change is that '... we need to rely on private incentives to encourage disclosure of information related to the management and valuation of intangibles...'. Similarly, 'Moreover, to the extent that investors find such disclosures useful, market forces will provide managers with incentives to disclose them ...', and '... to the extent that disclosures have net benefits firms themselves have incentives to voluntarily provide such disclosures ...', indicate the drift of the argument.

Such an unequivocal faith in market forces to elicit information is for me a case of *déjà vu*. In an influential paper at the time, the leading finance scholar Steve Ross (1979: 193) invoked the very same argument to reject the need for any disclosure regulation:

'... the new structure [incentive-signaling model] basically supports the view that there are

strong market forces tending to lead to *adequate disclosure in absence of disclosure legislation*, a view in sharp contrast to the traditional view that disclosure regulation is required because insiders have strong incentives to withhold information (emphasis mine).'¹

Skinner thus applies Ross' argument to the intangibles area. My question is: Why stop with intangibles? If market incentives for corporate disclosure are so effective, why require firms to disclose a cash flow statement, segment reporting, or fair values? Obviously, invoking market incentives to flatly reject disclosure proposals, without a careful consideration of market imperfections and managers' incentives, is a slippery slope.

3. Harms of current GAAP concerning intangibles

Skinner summarises his criticism of the various empirical studies suggesting that the current accounting for intangibles is harmful by: 'There is no evidence that the accounting or disclosure treatment of intangibles in and of itself results in systematically lower valuations for these firms.' This sweeping conclusion is not supported by Skinner's arguments. For brevity, I will comment on two research findings which Skinner criticises.

Boone and Raman (2001) document that research and development (R&D)-intensive firms have relatively high bid-ask spreads, and low depth, which in turn lead to excessive cost of capital. Skinner's criticism: '... these results simply reflect the fact that investors, as we would expect, believe that expenditures on intangibles are riskier than other investments.' Reading this, one would think that Boone and Raman did not control for risk in examining the relation between R&D and stocks' bid-ask spread and depth. Not so. They indeed do control for multiple risk factors, such as

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¹ At paper end, Ross adds a caveat to this sweeping conclusion.

return volatility, size, earnings volatility, beta, etc. Consequently more than just invoking a risk argument is required to reject Boone and Raman's findings.

Skinner then rejects several studies documenting *undervaluation* (and by implication – excessive cost of capital) of R&D-intensive firms, but ignores the most comprehensive and convincing study – Eberhart et al. (2004). These researchers document, based on comprehensive research using state-of-the-art risk-adjustment and long-term return cumulation methodologies, that firms which increased their R&D expenditures exhibit long-term abnormal positive returns, which leads the researchers, after rejecting various alternative explanations, to conclude: 'Our results provide strong evidence that investors systematically underreact to the benefit of an R&D increase.'

Skinner's reaction to the R&D undervaluation studies is: '... studies that cumulate measured abnormal returns after an event date are notoriously difficult to interpret given vagaries in the measurement of expected returns ...'. I find this criticism, which can be levelled at practically any market-based accounting or finance research, overly sweeping and lacking in specificity. Eberhart et al. (2004), as well as Lev et al. (2007), use state-of-the-art risk adjustment research methodologies, and to just state that '... R&D projects are inherently riskier ...' dismisses too easily important findings about harms (systematic undervaluations) apparently caused by current accounting.

Ironically, Skinner finds fault with the evidence which '... is largely limited to firms with high levels of R&D expenditures'. But note that the lack of evidence on brands, information technology, and other major intangibles is due to the very thing he rejects – proposals to expand the disclosure about intangibles.

4. A different view of R&D and advertising growth

Skinner's Figure 1 – R&D and advertising growth – leads him to conclude that 'Aggregate R&D spending increases steadily over this period, and is 250% higher in 2005 than it was in 1980. This is striking evidence ... that its accounting treatment has not obviously adversely affected its growth'.

Skinner's Figure 1 portrays aggregate expenditures of Compustat firms on capital expenditures, R&D, and advertising during 1980–2005, adjusted for inflation. But US inflation during most of that period was subdued and fell (fortunately) far short of business growth. I, therefore, believe that to ascertain whether business investment in R&D and advertising was adequate, it is more appropriate to consider R&D and advertising growth relative to *business growth*. This is, of course, the basis for the widely-used, by both researchers and practi-

tioners, measures of R&D and advertising *intensities* – the variables scaled by sales.

In Figure 1, I present, for Compustat firms, R&D and advertising intensities (scaled by sales) during the 20-year period 1987–2006. I use the ratio of total R&D to total sales.

Evidently, the 'striking' growth all but disappears. R&D intensity increased over the entire 20-year period by 17.5% (less than 1% per year), and advertising intensity decreased by 22.5%. Relative to the scale of operations, US companies have not substantially increased investment in R&D and advertising. And this, during a period when intangibles became the prime value-drivers of businesses, and as US firms are increasingly challenged by high R&D-spending China. Whether this is related to accounting for intangibles or not is, of course, hard to prove.

5. What's to be done?

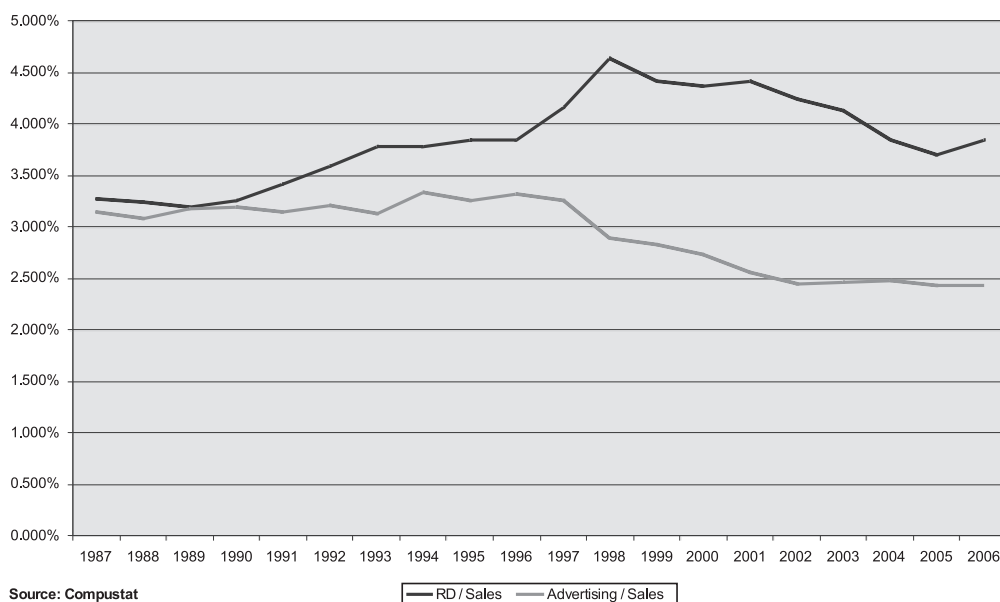
Let me turn from criticising the critic to what, in my opinion, should be done to improve the reporting of intangibles. Two things: capitalisation of certain investments in intangibles, and facilitation of improved standardised disclosures about intangibles.

The CEOs of the major accounting firms recently called for changing the accounting for intangibles, in part because, 'The large discrepancies between the 'book' and 'market' values ... provide strong evidence of the limited usefulness of statements of assets and liabilities ...' (DiPiazza, et al., 2006). Skinner rejects such an argument for change based on book-market discrepancy because, '... the balance sheet is not designed to form the basis for valuation. Rather, most approaches to equity valuation rely on information from the income statement, ...'.

This rejection of the balance sheet's relevance will come to the Financial Accounting Standards Board (FASB), among others, as a great surprise. The FASB clearly prefers the balance sheet approach over the income statement in standard setting (see FASB Concepts Statements on the preference of the asset/liability approach over the matching approach).

More importantly, I frankly never understood the separate balance sheet vs. income statement arguments. Is it not the case that things affecting the balance sheet also have an impact on the income statement? Is it not the case that the expensing of R&D understates the asset values and the earnings of R&D-growth companies? Accordingly. I support the CEOs of the major accounting firms, concerned that when firms' book values are, on average, a quarter or less than market values, something is basically wrong with financial reports. Is capitalising intangibles with reasonable reliable benefits the solution?

Figure 1
R&D and advertising intensities, 1987–2006



Well, the limited evidence we have provides an affirmative answer. Limited evidence, because except for software capitalisation and that of acquired intangibles, US firms do not capitalise intangibles. So, there are no data to test. But the evidence on capitalised software development costs (Aboody and Lev, 1998) clearly indicates: (1) the capitalised software is considered an asset by investors, and (2) earnings based on software capitalisation better predict future earnings than full-expensing earnings.² Furthermore, Oswald and Zarowin (2007), examining UK companies which capitalise R&D, document that R&D capitalisation leads to a higher association between current stock returns and future earnings (namely, investors are better informed by R&D capitalisation), and Kimbrough (2007a), studying R&D capitalisation by target companies, concludes (p. 1195):

‘The evidence is consistent with the notion that both financial statement recognition and analysts’ private information search activities lead to the revelation of private information about the value of R&D assets that investors incorporate into equity values.’

Regarding the capitalisation of acquired intangibles, Kimbrough (2007b) documents that investors find the values of recognised intangibles informative.

Admittedly somewhat limited, the evidence,

only some of it quoted above, nevertheless indicates that capitalising intangibles with reasonably reliable benefits (e.g. R&D, particularly of multi-projects, brand enhancement, or information technology) will be beneficial to financial statement users. I am not familiar with evidence to the contrary. An important point: R&D capitalisation doesn’t mean a simple aggregation of past expenditures, as many believe. Rather, as in software development costs (SFAS 86), capitalisation commences when the project passes successfully a technological feasibility test. Capitalisation thus conveys important inside information – success of the development programme – to investors.

The second improvement in financial reporting I envisage is a standardised disclosure template about investments in intangibles (currently, only R&D expenditures are separately reported) and their consequences. Considerable evidence indicates that disclosure about intangibles, not necessarily their value, is highly relevant to investors. For example, the extent of information about product development stage at IPOs of biotech companies is negatively associated with stock volatility and bid-ask spreads (Guo et al., 2004); intensity of royalty income from licensing patents is positively associated with the market valuation of R&D expenditures (Gu and Lev, 2004); disclosure of

² These findings were corroborated and extended by Mohd (2005).

innovative activities by high tech firms is value-relevant to investors (Gu and Li, 2003; Gu and Li, 2007); investors react to the granting of patents (Austin, 1993), and the quality of the scientific workforce is positively related to market values (Darby et al., 1999). This is only a partial list of evidence.

This evidence clearly indicates that information about investments in intangibles and their consequences (patents granted and licensed, product development stage, etc.) is highly relevant to investors. However, such information is haphazardly disclosed, not unlike segment information before its standardised disclosure was mandated. It would, therefore, be highly beneficial if an authoritative body, such as the FASB or the Securities and Exchange Commission (SEC), will develop templates for disclosure about intangibles, leading to the dissemination of standardised and comparable information about these all-important assets. I provide such a general template in Lev (2001), and the SEC Commission (Garten, 2001), strongly endorsed this idea.

Skinner, however, claims that such proposals will not work because: 'First, many of the measures would be industry or firm specific, and so not subject to standardisation or comparison. Second, ... many of these measures will be difficult to verify in an objective way ...'. Not so. True, some the disclosures will be applicable to broad industry groups (R&D and patents to all high tech and science-based sectors, for example) – though definitely not firm-specific – but note that much of current GAAP is industry-specific: insurance and securities companies accounting; regulated enterprises; movies, music and cable accounting; for example. Such information is obviously standardised within broad industry groups. Moreover, there is nothing new in my proposal for establishing *disclosure norms* about intangibles. SFAS 161 (derivatives), for example, is in part, a codification of measurements and risk assessments practised by some firms, and turned by SFAS 161 to a standardised disclosure.

As to Skinner's issue with the objective verification of the proposed data, many of the proposed measures, such as investment in employee training or information technology, product development stage, or percentage of sales from recently introduced products (an important innovation indicator) are *factual*, and easily subject to auditor verification.

6. Postscript

Toward the end of his paper Skinner writes '... it is difficult to see how accounting rules could be modified ... without changing the overall accounting model in important ways.' So what, if the accounting model has to be changed? Isn't the

accounting system that just over the last ten years failed to give an inkling about the late 1990s huge bubble in tech stocks, failed to alert investors to the massive accounting scandals of the early 2000s, and fails again now to reflect appropriately the vanishing values of sub-prime mortgages, due for a major overhaul? After all, isn't the declared purpose of accounting information to '... provide information to help present and potential investors and creditors and others in assessing the amounts, timing, and uncertainty of prospective cash receipts...' (FASB, Concept No. 1, p. 686)? Why can the system of national accountants be substantially overhauled with respect to intangibles – capitalising software expenditures for several years now and currently considering the capitalisation of R&D and other intangibles – but the corporate accounting system cannot change?

References

- Aboody, D. and Lev, B. (1998). 'The value-relevance of intangibles: The case of software capitalization'. *Journal of Accounting Research* (supplement): 161–191.
- Austin, D. (1983). 'An event-study approach to measuring innovative output: The case of biotechnology'. *American Economic Review*, 83: 253–258.
- Boone, J.P. and Raman, K.K. (2001). 'Off-balance sheet R&D assets and market liquidity'. *Journal of Accounting and Public Policy*, 20: 97–128.
- Darby, M., Liu, Q. and Zucker, L. (1999). 'Stakes and stars: The effect of intellectual human capital on the level and variability of high-tech firms' market values'. *National Bureau of Economic Research*, Working paper 7201, Cambridge, MA.
- DiPiazza, S.A., McDonnell, D., Parrett, W.G., Rake, M.D., Samyn, F. and Turley, J.S. (2006). 'Global capital markets and the global economy: A vision from the CEOs of the international audit networks'. (Available [http://www.deloitte.com/dtt/cda/doc/content/dtt_CEOVision110806\(2\).pdf](http://www.deloitte.com/dtt/cda/doc/content/dtt_CEOVision110806(2).pdf) last accessed 20 March 2008).
- Eberhart, A., Maxwell, W. and Siddique, A. (2004). 'An examination of long-term abnormal stock returns and operating performance following R&D increases'. *Journal of Finance*, 54: 623–650.
- FASB (1978). Statement of Financial Accounting Concepts No. 1, *Objectives of Financial Reporting by Business Enterprises*. Financial Accounting Standards Board, US.
- FASB (1985). Statement of Financial Accounting Standards No. 86, *Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed*. Financial Accounting Standards Board, US.
- FASB (2008). Statement No. 161, *Disclosures About Derivatives Instruments and Hedging Activities – An Amendment of FASB Statement No. 133*. Financial Accounting Standards Board, US.
- Garten, J.E. (2001). *Strengthening Financial Markets: Do Investors Have the Information They Need?* Report of an SEC-Inspired Task Force.
- Gu, F. and Lev, B. (2004). 'The information content of royalty income'. *Accounting Horizons*, March: 1–12.
- Gu, F. and Li, J.Q. (2003). 'Disclosure of innovation activities by high-technology companies'. *Asia-Pacific Journal of Accounting and Economics*, 10: 143–172.
- Gu, F. and Li, J.Q. (2007). 'The credibility of voluntary

- disclosure and insider stock transactions'. *Journal of Accounting Research*, 45: 771–810.
- Guo, R., Lev, B. and Zhou, N. (2004). 'Competitive costs of disclosures by biotech IPOs'. *Journal of Accounting Research* (supplement): 319–355.
- Jones, D. (2007). 'Voluntary disclosure in R&D intensive industries'. *Contemporary Accounting Research*, 24: 489–522.
- Kimbrough, M. (2007a). 'The influence of financial statement recognition and analyst coverage on the market's valuation of R&D capital'. *The Accounting Review*, 82: 1195–1225.
- Kimbrough, M. (2007b). 'Do investors rely on purchase price allocation disclosure?'. Working paper, Harvard University.
- Lev, B. (2001). *Intangibles: management, measurement, and reporting*. Washington, D.C.: Brookings Institution Press.
- Lev, B., Nissim, D. and Thomas, J. (2007). 'On the informational usefulness of R&D capitalization and amortization', in *Visualizing Intangibles: Measuring and Reporting in the Knowledge Economy*. S. Zambon and G. Marzo, eds., Ashgate Publishing Co.: 97–128.
- Mohd, E. (2005). 'Accounting for software development costs and information asymmetry'. *The Accounting Review*, 80: 1211–1231.
- Oswald, D. and Zarowin, P. (2007). 'Capitalization of R&D and the informativeness of stock prices'. *European Accounting Review*, 16: 703–726.
- Ross, S. (1979). 'Disclosure regulation in financial markets: Implications of modern finance theory and signalling theory', in Edwards, ed., *Issues in Financial Regulation*, McGraw Hill: 177–202.